velleman-kit HIGH-Q

K6501

REMOTE CONTROL BY TELEPHONE

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H6501G-ED1

REMOTE CONTROL BY TELEPHONE

This kit offers new and exciting possibilities for telephone lines, since it is possible to turn on or off up to three devices over the telephone. It is also possible to check the condition of a switch (open or closed), even at the other side of the world. Example: when you are away on holiday, you may switch on and off the lights from time to time, check the alarm or turn on the heating before you return home.
The remote control is operated by means of the push buttons of your telephone set, provided this is a DTMF telephone (this type of telephone sets produces a beep each time a button is pressed). A major advantage of this circuit lies in the fact that audio signals are used to tell you whether a specific output has been turned on or off. The operation is protected by a user-defined code, which is simply entered by means of the telephone buttons. If you do not have a DTMF telephone, our separate DTMF generator type PD888 may be used.

SPECIFICATIONS

- Three outputs with LED indicator
- One contact input with LED indicator
- For one output a relay is included: 10A/250VAC
- Pick up after ± 8 or after ± 3 rings (selectable)
- Automatic situation report after pick up:
  Order: input - output 1 - output 2 - output 3
  Double tone if an output (or input) is on.
  Single tone if an output (or input) is off.
- Automatic termination if no code is entered within 20 seconds.
- Number of safety codes: from 00 to 99
- Local manual operation
- Code system: DTMF
- Supply voltage: 12VAC/300mA

Subject to modifications

CONNECTION

- Connect the telephone connections A and B to the telephone line connections a and b.
- Connect a transformer or adapter of 12VAC min. 300mA to the AC connections.
- If required, connect the switching outputs to the devices. The three outputs between L and P are normally open contacts
- If you want to check the condition of a (dead) switch, it may be connected between the SW terminals. If the switch is closed, the green IN LED will light up.

MANUAL OPERATION

- The three outputs may be turned on or off manually by means of the push button. If the output is on (contact closed) the corresponding LED will light up.
- Press the push button once to turn output 1 on or off.
- Press the push button twice shortly after one another to turn output 2 on or off.
- Press the push button three times shortly after one another to turn output 3 on or off.

SETTING THE CODE

See table to set the first digit (CODE1 or decades) and the second digit (CODE2 or units).

SETTING THE NUMBER OF RINGS

Normally the device is set to pick up the phone after ± 8 rings. If, however, you would like the device to pick up the phone sooner (after ± 3 rings), the manual operating push button should be held pressed before switching on the power supply. Output 1 will switch on by way of confirmation.

USE

1- ESTABLISHING THE CONNECTION:
- Call the phone number to which the remote control is connected.
- After about 3 or 8 rings the remote control will answer. The red "ON LINE" LED on the device will flash.
- A few seconds after picking up you will hear the condition of the outputs. First de switch input, then output 1, output 2, and output 3 in that order. A double tone indicates that the condition is ON, whereas a single tone indicates that the condition is OFF.

2- RETRIEVING INFORMATION FROM OUTPUTS OR INPUT:
- Enter: code1, code2 and then 0 0. Now you will once again hear the condition of the input and of the outputs. This procedure may be repeated as often as you like.

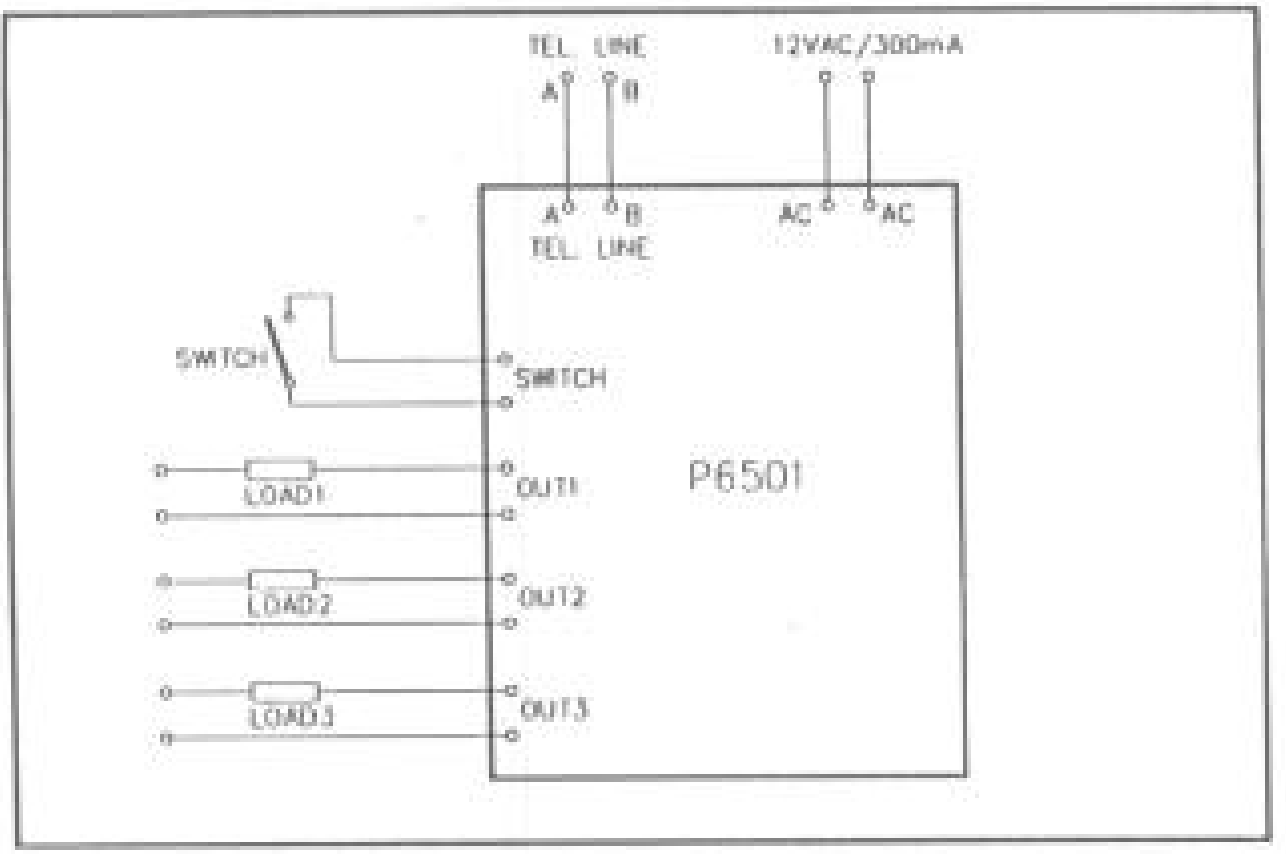
3- SWITCHING A PARTICULAR OUTPUT ON:
- Enter: code1, code2, output number, **1**. After a few seconds you will hear the condition of the input and of the outputs.

Example: Suppose you want to switch output 2 on and that your code is 43.
Enter the following digits: 4-3-2-1.

4- SWITCHING A PARTICULAR OUTPUT OFF:
- Enter: code1, code2, output number, **0**. The condition of the input and of the outputs will be repeated immediately.

Example: Suppose you want to switch output 2 off and that your code is 43.
Enter the following digits: 4-3-2-0.

NOTES:
1- If you do not press a button within 20 seconds, the connection will be terminated automatically.
2- If you enter a wrong code, you will hear an alarm tone. After that, you still have two chances to enter the correct code. If the correct code has not been entered after three attempts, the device will terminate the connection.



0	SW2 DCBA CODE1	SW2 DCBA CODE2	0
1			1
2			2
3			3
4			4
5			5
6			6
7			7
8			8
9			9

CODE TABLE

HIGH-Q

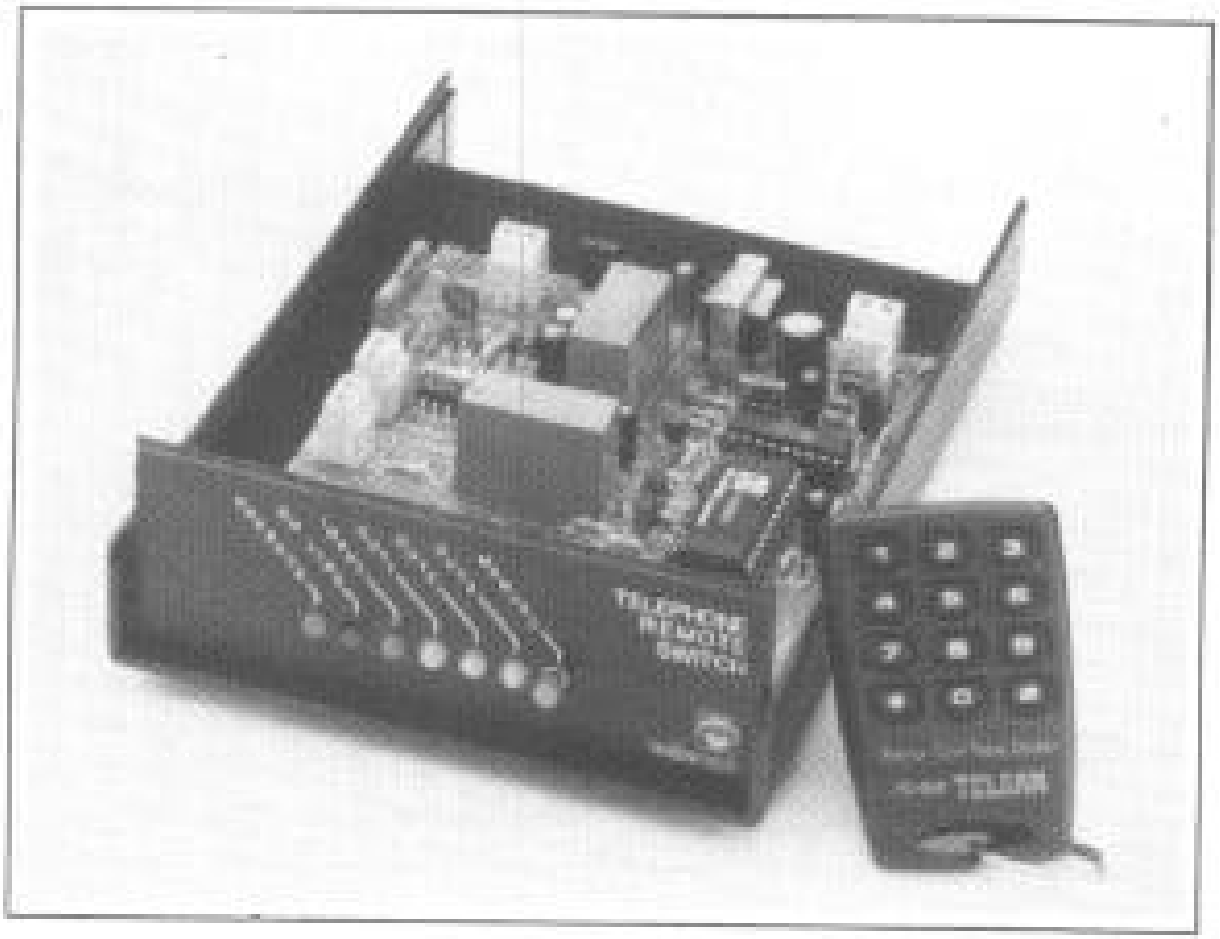
velleman-kit

K6501

REMOTE CONTROL BY TELEPHONE

- THREE OUTPUTS WITH LED INDICATION
- ONE CONTACT INPUT WITH LED INDICATION
- FOR ONE OUTPUT A 10A. RELAY IS INCLUDED
- AUTOMATIC SITUATION REPORT AFTER PICK UP
- 100 SAFETY CODES - D.T.M.F. CODE SYSTEM
- FRONT STICKER INCLUDED (NOT THE HOUSING)
- BOARD DIMENSIONS: 130 X 106mm

modifications reserved



code	I	P	E	SF	S	DK	N	D	GB	F	NL	code
	CODICE COLORE	CODIGO DE CORES	CODIGO DE COLORES	VÄRIKOODI	FÄRG SCHEMA	FARVEKODE	FARGEKODE	FARBKODE	COLOURCODE	CODIFICATION DES COULEURS	KLEURENCODE	
0	Nero	Preto	Negro	Musta	Svart	Sort	Sort	Schwarz	Black	Noir	Zwart	0
1	Marrone	Castanho	Marrón	Ruskea	Brun	Brun	Brun	Braun	Brown	Brun	Bruin	1
2	Rosso	Encarnado	Rojo	Punainen	röd	Rød	Rød	Rot	Red	Rouge	Rood	2
3	Arancio	Laranja	Naranjado	Oranssi	Orange	Orange	Orange	Orange	Orange	Orange	Oranje	3
4	Giallo	Amarelo	Amarillo	Keltainen	Gul	Gul	Gul	Gelb	Yellow	Jaune	Geel	4
5	Verde	Verde	Verde	Vihreä	Grön	Grøn(n)	Grøn	Grün	Green	Vert	Groen	5
6	Blu	Azul	Azul	Sininen	Blå	Blå	Blå	Blau	Blue	Bleu	Blauw	6
7	Viola	Violeta	Morado	Purpura	Lila	Violet	Violet	Violet	Purple	Violet	Paars	7
8	Grigio	Cinzento	Gris	Harmaa	Grå	Grå	Grå	Grau	Grey	Gris	Grijs	8
9	Bianco	Branco	Blanco	Valkoinen	Vit	Hvid(t)	Hvit	Weiss	White	Blanc	Wit	9
A	Argento	Prateado	Plata	Hopea	Silver	Sølv	Sølv	Silber	Silver	Argent	Zilver	A
B	Oro	Dourado	Oro	Kulta	Guld	Guld(t)	Gull	Gold	Gold	Or	Goud	B

P6501

1

J (!)

2 1/4W

R1: 560 (5-6-1-B)
R2: 100 (1-0-1-B)
R3... R18: 4K7 (4-7-2-B)
R19...R21: 100K (1-0-4-B)
R22: 330K (3-3-4-B)
R23... R25: 390 (3-9-1-B)
R26... R29: 820 (8-2-1-B)
R30: 2K2 (2-2-2-B)
R31: 82 (8-2-0-B)
R32: 6K8 (6-8-2-B)

3 0.5W

R33, R34: 22 (2-2-0-B)
R35... R37: 220 (2-2-1-B)

4 1W

R38: 5K6 (5-6-2-B)

5

D1... D6: 1N4148
D7... D14: 1N4002... 1N4007

6 0.5W

ZD1... ZD3: 4V7 (4,7V)

7 1.3W

ZD4, ZD5: 27V

8

IC1... IC3

9

X1: 3.5795MHz

10

C1: 4n7 (472)
C2: 22nF (223)
C3: 33nF (333)
C4... C9: 100nF (104)
C17: 0.47µF/250V

11

C10... C13: 1µF (!)
C14, C15: 10µF (!)
C16: 470µF (!)

12

T1... T6: BC547A/B/ C

13

T7: BD681 (!)

14

VR1: 7805

15

VDR1: 230V

16

SW1: 1P / ON

17

J1, J2, J3, J4 : 2P (!)

18

TRAFO1: TR1/1 (600/600)

19

LD1, LD3: 5mm (5) (!)
LD2: 5mm flash (2) (!)
LD4... LD6: 5mm (4) (!)

20

IC1: 4N35
IC2: UM92870C
IC3: VK6501 / PIC16C55

21

RY1, RY2: 1P/12V

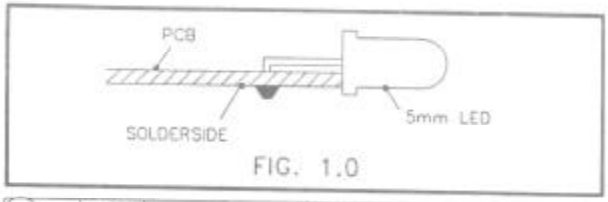
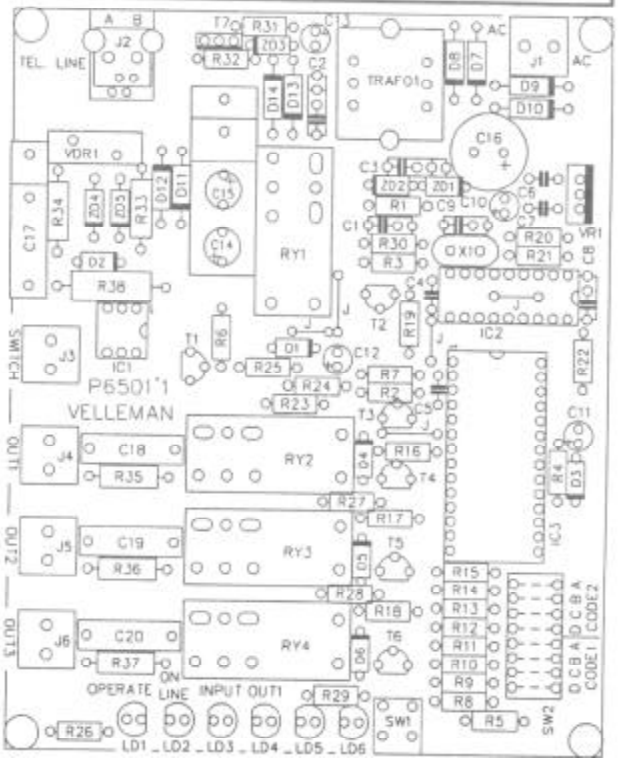


FIG. 1.0



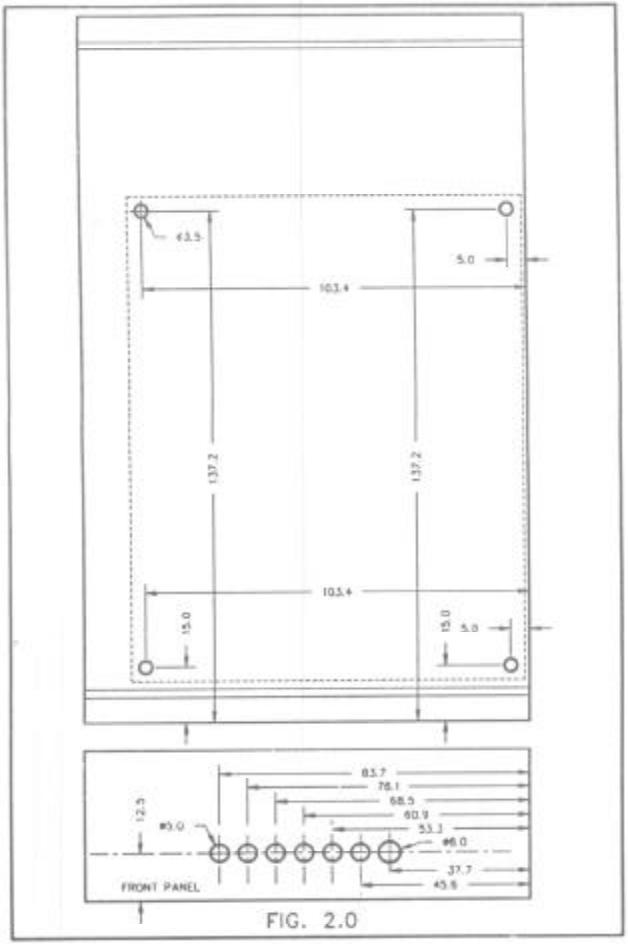


FIG. 2.0

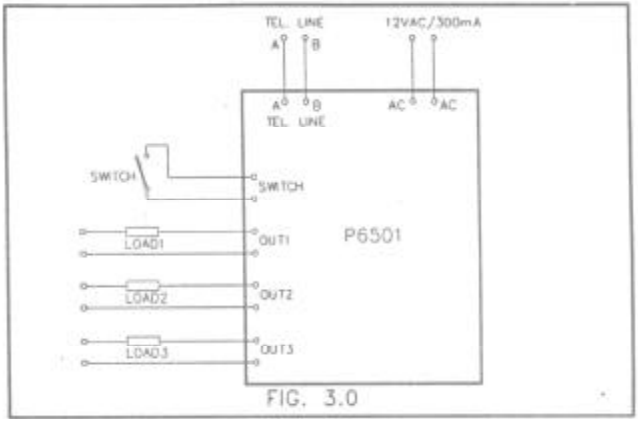
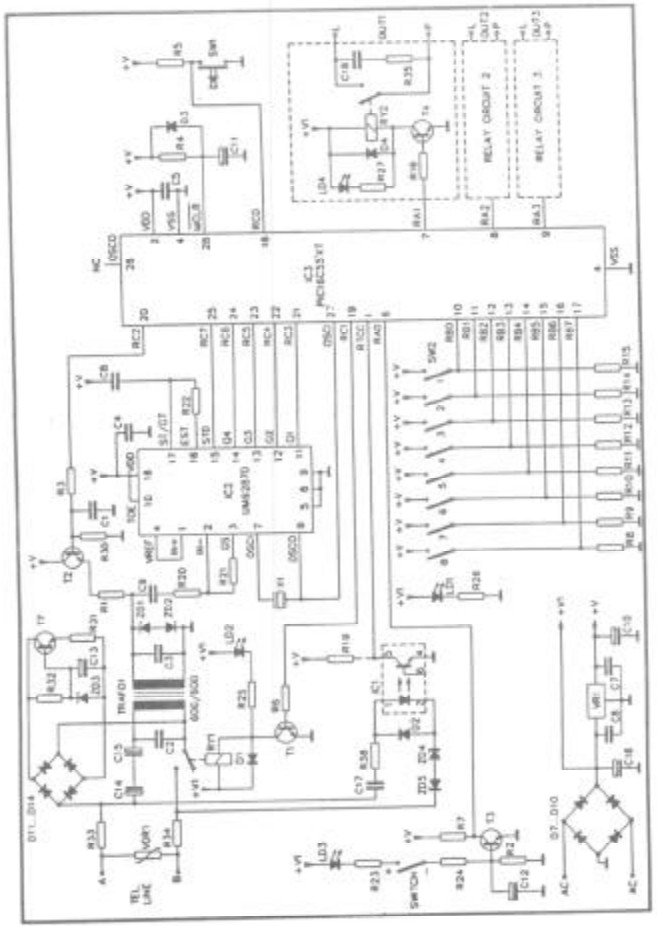


FIG. 3.0

0	SW2 DCBA CODE1	SW2 DCBA CODE2 0
1		1
2		2
3		3
4		4
5		5
6		6
7		7
8		8
9		9

CODE TABLE



NL Bij korrekte montage en gebruik, garanderen wij de goede werking van onze kits. Bij problemen kan men de kit bij de verdeler terug brengen. Bij fabricagefout is de herstelling gratis.
Wij zijn niet verantwoordelijk voor schade van gelijk welke aard, veroorzaakt door het falen van een kit.

F Si le montage et l'emploi sont correct, nous garantissons la bonne opération de nos kits. En cas de problème, vous pouvez renvoyer le kit à votre distributeur pour réparation. Si le problème est dû à une erreur de fabrication, la réparation sera gratuite. Nous n'assumons aucune responsabilité pour des dégâts causés par la défaillance d'un kit.

GB We guarantee the good operation of this kit when correctly assembled and used. In case of trouble you can send the kit to the dealer for repair. The repair is for free when the trouble is caused by a production fault.
We are not responsible for damage of any kind caused by the failure of a kit.

D Bei korrektem Zusammenbau und sachemäßem Gebrauch garantieren wir die Fehlerfreie Funktion dieses Bausatzes. Im Falle einer Funktionsstörung können Sie dieses Kit Ihrem Händler zurückbesorgen zur Reparatur. Sollte der Grund dieser Störung ein Produktionsfehler sein, ist die Reparatur kostenloss.
Wir sind nicht verantwortlich für Schaden, vom Versagen der Bausatz verursacht.

N Vi garanterer byggesettets virkemåte når det er korrekt satt sammen og brukt. I tilfelle problemer, ta kontakt med din forhandler for reperasjon. Hvis problemene skyldes produksjonsfeil er reperasjonen gratis.
Vi er ikke ansvarlig for skader av noe slag forårsaket av eventuelle mangler i byggesettene, eller i oppbyggingen av disse.

DK Vi garanterer korrekt funktion af byggesæt der er samlet og anvendt korrekt. Fejlmonteret byggesæt kan sendes tilbage til forhandleren til reparation. Hvis fejlen skyldes en konstruktionsfejl, repareres
byggesættet gratis. Vi påtager os intet ansvar for skader forvoldt af byggesæt med fejl.

S Vi garanterar att denna byggsats fungerar bra när den är korrekt ihopbygd. Om problem uppstår kan Ni skicka byggsatsen till oss för reparation. Om byggsatsen vid leverans är felaktig står vi för utbyte/reparationskostnader.
Vi ansvarar ej för skador av något slag som orsakas av fel på denna byggsats.

SF Takaamme tämän sarjan toimivan oikein koottuna ja käytettynä. Ongelmatapauksissa voit lähettää sarjan maahantuojalle korjattavaksi. Mikäli vika on aiheutunut tehtaan tuotantovirheestä korjaus on ilmainen. Emme vastaa minkäänlaisesta sarjan vääränkäytöstä aiheutuneesta vahingosta.

E Garantizamos el buen funcionamiento de cada kit correctamente asemblado y empleado. Las reparaciones se harán en los talleres de los vendedores autorizados. La garantía cubrirá los defectos de fabricación.
No cubrirá cualquier avería si es consecuencia de un defecto del artículo/kit.

P Garantimos um bom funcionamento deste kit, quando correctamente montado e utilizado. No caso de problemas pode enviar o kit ao seu vendedor para reparação. Quando a avaria é causada por defeito de fabrico, a reparação é gratuita.
Não nos responsabilizamos por danos de qualquer tipo causados por uma avaria do kit.

I Garantiamo il buon funzionamento del kit se correttamente assemblato e usato. In caso di problemi potete mandare il kit al rivenditore per riparazioni. Se il problema è causato da errori di produzioni, la riparazione è gratuita. Non siamo responsabili per i danni di qualunque tipo causati da un malfunzionamento del kit.